DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	236907
Document Title:	Mothers Out Front and 6 other Companies Comments - CEQA Requirements for CEC Adoption of 2022 Building Standards
Description:	Letter from Mothers Out Front, Earthjustice, Sierra Club California, Alliance for Nurses for Healthy Environments, Sunrise Bay Area, 350 Bay Area, and the Climate Emergency Coalition
Filer:	System
Organization:	Mothers Out Front and 6 other Companies
Submitter Role:	Public
Submission Date:	2/25/2021 3:31:23 PM
Docketed Date:	2/25/2021

Comment Received From: Mothers Out Front and 6 other Companies
Submitted On: 2/25/2021
Docket Number: 19-BSTD-03

CEQA Requirements for CEC Adoption of 2022 Building Standards

Mothers Out Front, Earthjustice, Sierra Club California, Alliance for Nurses for Healthy Environments, Sunrise Bay Area, 350 Bay Area, and the Climate Emergency Coalition

Additional submitted attachment is included below.

December 22, 2022

Alice Reynolds
Senior Advisor to the Governor
State Capitol Building
Sacramento, CA 95814

David Hochschild
Chair
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Transmitted via Email

Re: CEQA Requirements for California Energy Commission Adoption of 2022 Building Standards

Dear Senior Advisor Reynolds and Chair Hochschild:

Mothers Out Front, Earthjustice, Sierra Club California, Alliance for Nurses for Healthy Environments, Sunrise Bay Area, 350 Bay Area, and the Climate Emergency Coalition write to express our concerns with the significant greenhouse gas, air quality and public health impacts that would result from continuing to allow gas appliances in new construction under the California Energy Commission's ("CEC") forthcoming 2022 Building Energy Efficiency Standards ("Standards"). Because CEC adoption of the 2022 Standards is subject to the requirements of the California Environmental Quality Act ("CEQA"), Standards that continue to allow gas in new construction would require preparation of an environmental impact report ("EIR") and trigger the requirement to adopt all feasible alternatives that mitigate or avoid these impacts. To avoid the significant environmental impacts resulting from expanding reliance on gas, the CEC should adopt all-electric new construction requirements for the 2022 Standards.

CEQA requires preparation of an environmental impact report (EIR) whenever a project "*may* have a significant effect on the environment." Pub. Res. Code § 21151(c) ("Section 21151(c)") (emphasis added). Section 21151(c) "creates a low threshold requirement for initial preparation of an EIR and reflects a preference for resolving doubts in favor of environmental review." *Jensen v. City of Santa Rosa* (2018) 23 Cal. App. 5th 877, 884. If there is substantial evidence in the record to support a "fair argument" that a project may have significant environmental effects, an EIR *must* be prepared; "contrary evidence is not adequate to support a decision to dispense with an EIR." *Id.* Moreover, if any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. 14 Cal Code Regs §15063(b)(1); *see also County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal. App. 4th 1544, 1580.

On the other hand, if the lead agency—here, the CEC—determines that the project will not have a significant effect on the environment, it need not prepare an EIR, and may adopt a negative declaration instead. Pub. Res. Code § 21080(c).

Here, **if the Standards do not include an all-electric mandate for new residential construction, the "fair argument" standard is easily satisfied: there is substantial evidence in the record that the Standards may have a significant impact on the environment**. Specifically, a building code that allows gas-fueled appliances in new residential construction will (1) cause substantial and adverse public health impacts, (2) increase greenhouse gas ("GHG") and nitrogen oxide (NO_x) emissions, and (3) directly conflict with state law and policy that mandate statewide reduction of such emissions. All three effects constitute significant environmental impacts for purposes of CEQA. Moreover, all three are supported by far more than "fair arguments." Because the low threshold fair argument test is met, the CEC must prepare an EIR if it declines to include an electrification mandate in the Standards. *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal. App. 5th 358, 377. By contrast, if the Standards impose an electrification mandate, the CEC would avoid any of the impacts associated with new gas infrastructure and could rely on a negative declaration.

A. The CEC's failure to mandate building electrification will result in significant adverse public health impacts.

Health and safety effects, including adverse health impacts from air pollutants, may constitute significant environmental impacts for the purposes of CEQA. *See, e.g.*, *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517-22; 14 CCR § 15126.2(a). Here, without an all-electric mandate for new residential construction, the Standards will increase noxious air pollutants, causing significant adverse public health impacts.

Gas appliances in buildings make up a quarter of California's NO_x emissions from natural gas. NO_x is a precursor to ozone and particulate matter, which are key pollutants to curb in order to comply with state and federal ambient air quality standards. Moreover, the combustion of gas in household appliances, such as stoves, produces harmful indoor air pollution, specifically nitrogen dioxide, carbon monoxide, nitric oxide, formaldehyde,

acetaldehyde, and ultrafine particles, often in excess of the levels set out by the California Ambient Air Quality Standards and the National Ambient Air Quality Standards.[1]

In particular, the California Air Resources Board ("CARB") warns that "cooking emissions, especially from gas stoves, are associated with increased respiratory disease."[2] Children in homes with gas stoves are particularly at risk. A meta-analysis examining the association between gas stoves and childhood asthma found that "children in homes with gas stoves have a 42 percent increased risk of experiencing asthma symptoms (current asthma)" and "a 24 percent increased risk of ever being diagnosed with asthma by a doctor (lifetime asthma)."[3] Other health effects of NO_x in children may include cardiovascular effects, increased susceptibility to allergens and lung infections, irritated airways and other aggravated respiratory symptoms, such as chest tightness, wheezing and coughing, and learning deficits.[4]

This evidence—as well as related evidence submitted by numerous stakeholder in the docket for the 2022 Standards rulemaking —is substantial, and more than supports a fair argument that the Standards may have a significant environmental impact if they do not require electrification. The CEC must therefore prepare an EIR if it plans to adopt Standards that lack such a requirement.

B. Standards that do not require building electrification will significantly increase GHG emissions.

Increases in GHG emissions may constitute a significant environmental effect under CEQA. *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 503. Here, there is substantial evidence in the record that gas-fueled appliances in new residential construction will substantially increase statewide GHG emissions. This evidence supports a fair argument that the Standards may have a significant impact on the environment. Accordingly, if the Standards do not mandate building electrification, the CEC must prepare an EIR.

Stationary energy use represents a major source of GHG emissions, much of which comes from gas end uses, such as space and water heating in buildings. A recent analysis by the Rocky Mountain Institute (RMI) shows that California has the second-largest volume of building GHG emissions in the United States, representing 8% of the total national GHG emissions from

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[1] *See, e.g.*, Jennifer M. Logue et al., Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California, 122 Envtl. Health Perspectives 43, 43–50 (2014); Victoria L. Klug et al., Cooking Appliance Use in California Homes—Data Collected from a Web-Based Survey, Lawrence Berkeley National Laboratory (Aug. 2011); John Manuel, A Healthy Home Environment?, 107 Envtl. Health Perspectives 352, 352–57 (1999); Nasim A. Mullen et al., Impact of Natural Gas Appliances on Pollutant Levels in California Homes, Lawrence Berkeley National Laboratory (2012); Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California, at 12–13.

[2] CARB, *Combustion Pollutants & Indoor Air Quality*, https://ww2.arb.ca.gov/resources/documents/combustion-pollutants-indoor-air-quality (last visited November 19, 2020).

[3] Brady Seals and Andee Krasner, Health Effects from Gas Stove Pollution, Rocky Mountain Institute, Physicians for Social Responsibility, and Sierra Club, 2020, at 13 (May 2020) ("Health Effects from Gas Stove Pollution"), https://www.psr.org/wp-content/uploads/2020/05/health-effects-from-gas-stove-pollutionpdf.

[4] *Id.*

buildings.[5] Moreover, between 2013 and 2017, California added nearly 250,000 gas customers, more than any other state during that time period.[6] In 2018 alone, 75,000 new California homes were built with gas infrastructure.[7]

As the CEC notes in its 2018 Integrated Energy Policy Report Update, new construction "essentially lock[s] in energy infrastructure," meaning that each new gas-fueled home constructed in 2022 and beyond will emit GHGs at the current rate for at least the next 30 to 40 years.[8] The clear effect of such new construction will be an increase in GHG emissions beyond the current baseline. More specifically, in the near term, RMI estimates that waiting just three years—that is, until the 2025 building energy code cycle—to require building electrification will result in an additional ***3 million metric tons*** of carbon emissions by 2030, "the equivalent of putting 650,000 more cars on the road for a year."[9]

Conversely, there is clear evidence that mandated building electrification will significantly reduce GHG emissions. In *Residential Building Electrification in California*, Energy and Environmental Economics (E3) determined that "electrification is found to reduce total greenhouse gas emissions in single family homes by approximately 30 to 60 percent in 2020, relative to a natural gas-fueled home."[10] Moreover, "[a]s the carbon intensity of the grid decreases over time, these savings are estimated to increase to approximately 80 to 90 percent by 2050, including the impacts of upstream methane leakage and refrigerant gas leakage from air conditioners and heat pumps."[11]

Building electrification brings significant GHG reductions, not only due to the energy mix on the grid, but also because heat pump technology is extraordinarily efficient. Rather than needing to generate heat through the combustion of fossil gas, heat pumps extract existing heat from the surrounding environment. Because electricity is used to move heat around rather than to create it, heat pump water heater ("HPWH") efficiency is far greater than 100 percent (energy services delivered are much greater than energy input). Accordingly, HPWHs use much less energy to heat water, and HPWHs generate significantly less GHGs than even the most efficient gas water heating.

For these reasons, E3 has concluded that building electrification is the most cost-effective path to reducing carbon emissions while meeting the energy demands of residential buildings.[12]

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[5] Rocky Mountain Institute, *The Impact of Fossil Fuels in Buildings: A Fact Base* (December 2019), p. 16, https://lpdd.org/wp-content/uploads/2020/03/Building-Electrification-fact-base-report.pdf.
[6] *Id.* at 40.
[7] RMI, *California Should Go All-Electric in New Construction—State's Largest Utility Agrees* (June 26, 2020) (last visited December 7, 2020), https://rmi.org/california-should-go-all-electric-in-new-construction-states-largest-utility-agrees/.
[8] CEC, *2018 Integrated Energy Policy Report Update, Volume II*, p. 26, https://efiling.energy.ca.gov/getdocument.aspx?tn=227391.
[9] RMI, *California Can't Wait on All-Electric New Building Code* (July 28, 2020) (last visited December 7, 2020), https://rmi.org/california-cant-wait-on-all-electric-new-building-code/.
[10] E3, Residential Building Electrification in California at iv (Apr. 2019), https://www.ethree.com/wp-content/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf.
[11] *Id.*
[12] E3, *Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model* (June 2018), pp. 3, 5, 54, https://efiling.energy.ca.gov/GetDocument.aspx?tn=223785; *see also* CEC, *2018*

Given this evidence, there is a fair argument that without an all-electric requirement for new residential construction, new housing units—on average, 80,000 new homes are built in California each year[13]—will continue to rely on gas-fueled appliances, increasing statewide GHG emissions well beyond their current baseline. Accordingly, if the Standards are adopted without an electrification mandate, the CEC must prepare an EIR.

C. Without a building electrification mandate, the Standards will conflict with state law and policy that mandate decreases in GHG emissions.

Conflicts with plans, policies, or regulations "adopted for the purpose of reducing the emission of greenhouse gases" may constitute significant environmental impacts under CEQA. *See* CEQA Guidelines, appen. G, § VII, subd. (b); 14 CCR § 15064.4(b)(3). If substantial evidence supports a fair argument that such a conflict exists, an EIR is required. *See Pocket Protectors v. City of Sacramento* (2004) 124 Cal. App. 4th 903, 930.

Here, Standards lacking a building electrification mandate will conflict with multiple state policies and regulations that have as their purpose the reduction of GHG emissions, including: (1) Executive Order B-55-18, which established a statewide goal of carbon neutrality by 2045;[14] (2) Executive Order S-3-05, which established statewide GHG emission reduction targets, including the reduction of GHG emissions to 80% below 1990 levels by 2050;[15] and (3) AB 32 and SB 32, which require the state to reduce its GHG emissions to 1990 levels by 2020, and 40% below 1990 levels by 2030, respectively.[16,17] In AB 32 and SB 32, the Legislature "emphatically established as state policy the achievement of a substantial reduction in the emission of gases contributing to global warming." *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 215.

The CEC has already recognized that "[b]uilding electrification is *essential*" to meeting the targets established in these policies.[18] Because building electrification is essential to meeting the state's GHG reduction mandates, the Standards must contain an all-electric requirement for new residential construction. Without this requirement, the Standards will not only conflict with state law and policy in theory, but by actually *increasing* GHG emissions, they will affirmatively obstruct it in fact. At the very least, there is evidence in the record supporting a fair argument that Standards allowing gas-fueled appliances may conflict with state law and policy. This is all

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Integrated Energy Policy Report Update, Volume II, pp. 28-30, https://efiling.energy.ca.gov/getdocument.aspx?tn=227391.

[13] California Department of Housing and Community Development, https://www.hcd.ca.gov/policy-research/housing-challenges.shtml (last visited November 19, 2020).

[14] Cal. Exec. Order No. B-55-18 (Sep. 10, 2018), https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf.

[15] Cal. Exec. Order No. S-3-05 (June 1, 2005), http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf.

[16] AB 32 (Nunez), Chapter 488, Statutes of 2006, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32 (codified at California Health & Safety Code § 38500 et seq.).

[17] SB 32 (Pavley), Chapter 249, Statutes of 2016, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32 (codified at California Health & Safety Code § 38566).

[18] Docket No. 18-IEPR-01, 2018 IEPR Update Volume II, at 28, 32 (Mar. 21, 2019).

that CEQA requires. The CEC must therefore prepare an EIR if the adopted Standards fail to mandate electrification in new residential construction.

Thank you for your consideration and we welcome the opportunity to further discuss our concerns.

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